

CMPUT 291 Project 1 Report

Our application is a command line interface which allows users to perform the tasks outlined in the project description.

After logging into the system, the main menu for this application looks like this:

PLEASE SELECT FROM THE FOLLOWING OPTIONS:

1. New Vehicle Registration
2. Auto Transaction
3. Driver License Registration
4. Violation Record
5. Search Engine
6. Exit

If the user selects the first option, they are taken to a page which allows them to enter a vehicle's serial number. If the serial number does not exist in the database, the user will be prompted to fill in the appropriate details of vehicle which they want to create at with that serial number. When the vehicle is created, the user will then be prompted to associate the new vehicle with a primary owner. If the user exists in the database, the system will confirm with the user that the returned person is the person to be associated with the vehicle. If so, the system registers the owner and asks if the user would like to add a secondary owner. This process continues like this until the user decides not to enter any more owners, at which point the system exits to the main menu.

If the user selects the second option, they are taken to a page which allows them to enter a serial number for the vehicle to be sold. If the vehicle exists, the user is prompted to provide the SIN of the seller. If the seller exists, the user is prompted to provide the SIN of the buyer. If the buyer exists, the system will ask the user for the sale price and date of this transaction. Once these details are filled in, the system creates the sale and the user is taken back to the main menu. Note that if any vehicle or person does not exist with the provided VIN or SIN, the system will prompt the user to enter the correct information or exit to the main menu.

If the user selects the third option, the user is asked to enter the SIN of the user which they would like to register. If the SIN does not exist, the user is prompted to create a new person in the system. If the person does exist however, the user is then asked to confirm the information at that SIN. The system will ask the user to provide the class, issue date, years valid. and absolute path of the photo for the license. Once the user confirms the information is true, the system generates a license number and creates the license in the system.

If the user selects the fourth option, they user is asked to enter the issuing officer's SIN. If the officer does not exist in the system, then the user will be asked to enter the proper information. If the officer does exist, the user will be asked to then enter the SIN of the violator. Using the same logic as above, the user is asked to enter the vehicle's VIN. After this, the user is asked to select a violation type from a list of possible violations provided by the database. Once the user chooses a violation type, they are then asked to provide an issue date, place, and any additional descriptions for the ticket. Once all these details are entered, the user is asked to review before creating a new violation in the system.

If the user selects the fifth option, they are then given a sub-menu, asking them to choose between 3 options:

1. Driver Description
2. Violation Records
3. Vehicle History

If the user selects “Driver Description”, they are then asked to enter a license number or a name. If the user selects license number, they are then asked to enter a license number. The system will then take this number and query the database for the person registered under the license, and display the appropriate records for that person. The same result will be returned in the user enters a name, but this name will be queried in a case-insensitive manner, and any duplicate results will also be displayed.

If the user selects “Violation Records”, the user is asked to select between searching by license number or SIN. Regardless of the option selected, the system will return the records of the person entered.

If the user selects “Vehicle History”, they are asked to enter a VIN. The system will take this VIN and return all appropriate history for that vehicle.

NOTES:

1. If the user presses ‘q’ at any input option, the user will be returned to the main menu.